REMEDIAL ACTION WORK PLAN

Former PCB Remediation Site

Front Street Beautification Corridor Project
San Pedro, California 90731

04-LAHD-007

ADP #121024-532 H

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1.0 INTRODUCTION

This Remedial Action Work Plan (Work Plan) was prepared for the U.S. Environmental Protection Agency (USEPA) on behalf of the City of Los Angeles Harbor Department (Harbor Department) to describe the proposed remediation of contaminated soil present at the Former Polychlorinated Biphenyls (PCBs) Remediation Site (hereafter referred to as "the Site"). The Site is located mostly within a larger planned project area, known as the Front Street Beautification Corridor Project (Corridor Project). The Corridor Project will be located along Front Street and North Pacific Avenue in San Pedro, California. The Site is located at the northeast corner of Front Street and North Pacific Avenue (Figure 1). This Work Plan presents the proposed remedial actions for residual PCBs in soil, which will be completed at the Site in preparation for redevelopment of the Site into a park.

This Work Plan complements a May 21, 2014 Harbor Department/SGI Notification to USEPA of pending PCB-containing remediation (Notification). This Work Plan provides a site description, regulatory status, summary of PCB data at the Site and vicinity, and proposed procedures for remedial actions to address PCBs in soil and concrete at the Site.

1.1 Site History and Description

The Site is located along the north side of Front Street, northeast of the intersection of Front Street and North Pacific Avenue. The entire Corridor Project is currently unpaved with a few utility poles. Residual inactive petroleum pipelines associated with the former Chevron Marine Terminal have been removed in advance of site redevelopment. The petroleum lines have been inactive since the early 1990s.

A review of Site records indicate that an area approximately 75 feet by 50 feet in the vicinity of a sub-grade pipe tunnel and a former electrical substation and vault were assessed in the late 1990s and found to contain PCBs in soil (Tetra Tech, 1999; included in Appendix A). Specifications related to the pipe tunnel indicate that it was constructed to protect the subsurface oil pipelines from the weight of a surface railway that is no longer on Site. The PCBs were reported to be the likely result of a surface spill from the former electrical equipment area north of the pipe tunnel. In 1999, surface and subsurface soil were excavated, confirmation samples were taken, and a summary report was prepared. The 1999 summary report and various maps in that report refer to the pipe tunnel as a culvert; however, it was not constructed to convey water, just to protect the pipes. The 1999 Tetra Tech report documented initial PCB concentrations in surface soil of up to 4,800 mg/kg, the removal and off-site disposal of PCB-impacted soil, and the confirmation samples indicating that all final residual PCB concentrations were below the 1998 USEPA Preliminary Remediation Goal (PRG) of 1.3 milligram per kilogram (mg/kg). During the 1999 soil removal action, wipe samples were also collected from the pipe tunnel's concrete surface and analyzed for PCBs, and were found to be below 1998 PRGs. The 1999 Tetra Tech soil removal report is included in Appendix A.

The Site is essentially owned by the Harbor Department, as the Harbor Department has the role of landlord for tidal lands within the City of Los Angeles, per a Tidal Trust Agreement with the State of California.

1.2 Recent Investigation and Remedial Approach

During 2014, Site investigations associated with the proposed park indicated that the area of former PCB remediation includes residual PCBs in soil and concrete within the proposed footprint of the park, and residual PCBs in soil extending under active railroad lines and the service access road north of the proposed park. Figure 2 presents a site plan that illustrates the extent of the park project and the location of the railroad lines and service access road north of the former PCB remediation area. Based on the presence of these PCB impacts in both a southern area that is accessible and a northern area that is not accessible due to the presence of very active railroad lines, the remedial approach for the Site will include a phase of soil removal in the accessible area, and mitigation for the inaccessible area. Areas with PCBs in soil within the park footprint are proposed to be removed. A conceptual site model (CSM) for the inaccessible northern area where PCBs are present under the active railroad lines is presented in Section 3.0.

Since the 1999 soil removal actions, no incident of a PCB spill has been reported to the Harbor Department. Therefore, all residual PCB concentrations measured in recent investigations are attributed to the pre-1999 spills or releases.

Upon completion of the PCB soil cleanup in the proposed park footprint, the southern PCB area will be developed into a park as part of the Corridor Project and the northern PCB area will remain an active railroad line and service access road.

1.3 Regulatory Status

In addition to USEPA regulatory oversight of the PCB remediation activities, this Site investigation and remediation is also covered under Los Angeles Regional Water Quality Control Board (LARWQCB) directives issued to oil companies and the Harbor Department as part of the approval for the proposed park. The directives set clean up levels for the oil company pipeline removal and for the Corridor Project. On May 30, 2014, a LARWQCB directive identified specific provisions as discussed in Section 2.1 (Applicable Regulatory Levels for PCBs) of this document.

1.4 Site Contamination

The 1999 Tetra Tech report describes the previous finding, delineation, removal, and confirmation sampling of PCBs at the Site. The report indicates that, prior to the 1999 soil removal actions, PCB concentrations of up to 4,800 mg/kg were reported, and PCB concentrations above 1998 PRGs were located in surface soil above the pipe tunnel, and in deeper soil along the edges of the pipe tunnel. Post-remediation PCB concentrations were all below 1.3 mg/kg, ranging from non-detect to 1.15 mg/kg at the far east edge of the excavation.

In 2014, Pacific Edge Engineering (PEE) conducted additional soil investigations for the Harbor Department. Hand-auger sampling was conducted throughout the proposed development area, as part of an environmental assessment for the development project. The results of 2014 sampling indicated residual PCB concentrations of up to 8.5 mg/kg in the general vicinity of the pipeline tunnel, and residual PCB concentrations of up to 35 mg/kg north of the former electrical vault location (Figure 2). Groundwater is approximately 10 feet below grade in this area.

The presence of PCBs in the upper concrete surface of the pipe tunnel indicated that PCBs had impacted the concrete, with a potential impact to soil contained within the tunnel if PCBs had leaked through the concrete. Therefore, to evaluate the presence of PCBs in soil inside the pipe tunnel, PEE investigated the internal part of the pipe tunnel by coring through the upper, horizontal "roof" of the pipe tunnel to assess the potential presence of soil inside the pipe tunnel, and its PCB concentrations. The soil inside the tunnel was found to contain no detectable PCBs.

Table 1 presents the PCB analytical results following area-wide sampling performed by PEE. Table 2 presents the PCB analytical results for concrete samples collected from the upper surface of the concrete tunnel. Figures 3A and 3B presents the distribution of residual PCBs in soil at the Site and immediate vicinity. Figures 4A, 4B and 4C illustrate in cross-sectional view the lateral and vertical distribution of PCB concentrations. Appendix B contains the 2014 soil analyses laboratory reports associated with the Site. Appendix C contains the laboratory reports of concrete samples analyses.

The PCB results are presented on Figures 3A, 3B, 4A, 4B, and 4C, and indicate that:

- Detected PCBs are primarily located in the vicinity of the former electrical equipment area and adjacent pipe tunnel. Analytical results indicate that the south, north, west, and east boundaries of contamination are defined.
- Residual concentrations of PCBs are much lower than the initial 1999 concentrations of up to 4,800 mg/kg, with all reported residual soil PCB concentrations under 50 mg/kg.
- Under the future park footprint, PCBs are found at concentrations above 0.22 mg/kg within a general area of 100 feet by 100 feet, extending to a depth of two to six feet below grade.
- The inside of the eastern part of the pipe tunnel, under the footprint of shallow soil PCB contamination, contains soil that does not contain PCBs.
- At all locations tested, the PCB concentrations indicate a general decrease in PCB concentrations with depth below the assumed 1999 grade, confirming the interpretation of a likely pre-1991 surface spill with primarily lateral migration.
- Only two concrete samples contained PCBs at concentrations over 0.22 mg/kg, at sample locations C-3 and C-1, located in the eastern part of the pipe tunnel. The presence of shallow PCBs over the eastern part of the tunnel and just south of the former electrical equipment area supports the previous interpretation of a PCB surface spill near the former electrical equipment area, with PCBs migrating southwards over the edge of the concrete pipe tunnel.

- The area north of the proposed park is an industrial area, consisting of a raised topography associated with the active railroad lines and adjacent service access road, and that area contains soil with PCB concentrations over 0.22 mg/kg. The elevated concentrations, however, are below a depth of 1.5 feet from the raised surface grade to a depth of 8 feet.

2.0 PROPOSED SOIL AND CONCRETE REMOVAL AND PARK CONSTRUCTION

As part of the redevelopment of the Front Street area, soil exceeding cleanup goals is to be removed prior to park construction. In addition, the top section of PCB-impacted concrete will be removed. The PCB cleanup of both the soil and concrete within the park construction area will be completed in advance of construction and development activity. Ultimately, the Site will be converted to a park with landscaping and concrete pedestrian public walkways. Residual PCBs in soil north of the park footprint and under the railroad lines are evaluated in the CSM in Section 3.0. The park area will be separated from the railroad and access road to the north by a fence that will prevent public access to the north.

2.1 Applicable Regulatory Levels for PCBs

The LARWQCB requirements for the Front Street Beautification Corridor include a provision that soil removal in the upper 2 feet achieve cleanup levels based on the environmental screening levels (ESLs) for residential soil. For PCBs, the residential soil ESL is 0.22 mg/kg; therefore, the excavations will be completed to meet this cleanup level (0.22 mg/kg) for the upper 2 feet of soil. The LARWQCB directive would allow residual PCB concentrations in deeper soil of up to 0.74 mg/kg. However, the USEPA indicated that the approval of any residual PCB concentrations above the residential Regional Screening Level (RSL) would require a deed restriction for future commercial or residential site use. Because a deed restriction is not practically applicable to this site, the residential RSL of 0.24 mg/kg for all soil deeper than 2 feet would be appropriate for the site. For simplicity the shallow cleanup goal of 0.22 mg/kg and deeper cleanup goal of 0.24 mg/kg will be combined into a single conservative 0.22 mg/kg cleanup goal for all soil at the Site.

2.2 Soil and Concrete Removal

Any accessible soil or concrete containing PCB concentrations above cleanup levels in the proposed park footprint and accessible areas will be removed as part of the PCB removal efforts prior to construction of the Corridor Project, following health and safety and decontamination procedures. The locations sampled by PEE will be marked in the field by a professional surveyor to identify the areas to be excavated.

The soil will be stockpiled or direct-loaded into trucks for transportation (after USEPA notification) for disposal. The soil excavation will consist of the removal of soil in two subareas in the park footprint; a southern subarea in the vicinity of the pipe tunnel, and a subarea north of the pipe tunnel and south of the service access road and railroad lines.

Testing of the concrete indicated that the eastern section of the upper concrete surface of the pipe tunnel contains PCBs over 0.22 mg/kg (samples C-1 and C-3), and all the upper concrete section and the northern and southern vertical walls of the pipe tunnel east of sample location C-4 will be broken up, removed and hauled off-site, such that any remaining concrete meets the cleanup levels,

as evidenced by sampling results of concrete sidewalls and soil at the bottom of the concrete structure

In the proposed southern excavation subarea, excavation will include shallow soil removal in the vicinity of an existing, active utility pole operated by the Los Angeles Department of Water and Power (LADWP). Excavation in that part of the Site will require coordination with LADWP to ensure that the integrity of the pole and supporting wires can be maintained.

The northern subarea to be excavated will extend towards the area of the active railroad lines and service access road. Excavation of the northern end of that excavation subarea may depend on the ability to access the railroad-controlled parcel.

After soil removal, confirmation sampling and backfilling, a fence will be installed as part of the forthcoming construction project that will prevent public access to the northern area, once the park is in use. Figure 3B indicates the location of the planned fence associated with the park, and the fence is also illustrated on cross-sections Figures 4a and 4b and on Figure 5.

The area of raised topography north of the park is underlain by an overburden layer of soil that has been sampled and shown to contain PCBs in the upper 2.5 feet below 0.22 mg/kg. Based on the presence of that clean overburden, erosion of PCB-containing soil or run-off southerly to the park area is unlikely. Conservatively, the 2.5 ft elevation drop slope between the railroad area and the area north of the park could be covered with shotcrete to prevent slope erosion and reduce potential transport of PCBs from deeper soil under the access road and railroad towards the park, if requested by US EPA. The proposed slope surface improvement is also noted on Figures 4a, 4b and 5.

Figure 6 illustrates the proposed excavation area, slope stabilization, and post-excavation residual PCBs area.

2.3 Proposed Confirmation Sampling

The delineation of soil exceeding the cleanup goals included lateral and vertical delineation at sampling locations that were professionally surveyed, and the previous sampling locations will be re-marked in the field by a professional surveyor. The excavations will extend to the lateral soil boring locations and depths shown to contain no PCBs above cleanup goals. Figures 4A, 4B, and 4C and Figure 5 illustrate the proposed excavation boundaries and the location of known lateral delineation points. In excavations extending to locations of documented PCB concentrations below cleanup goals, no confirmation samples will be required. As shown on Figures 4A, 4B, and 4C and Figure 5, the excavation of soil from some areas represents a potential uncertainty in residual PCB concentrations at some locations, and confirmation sampling of soil in these undocumented areas is proposed (See Figure 5 for locations of proposed confirmation samples).

Tables 3A, 3B (southern excavation subarea), 4A and 4B (northern excavation subarea) list the known PCB concentrations that delineate the extent of PCBs exceeding cleanup goals, and also list the proposed supplemental confirmation sampling locations and depth. If expanded excavations are

required based on confirmation sampling results, sampling procedures will include sidewall samples collected every 25 linear feet at mid-depth from the sidewalls, and bottom samples will be collected at randomly selected grid-based 10-foot intervals, with a minimum of 7 samples (4 sidewall samples and 3 bottom samples) per excavation. The sample collection and analyses procedures were further described in the proposed Notification.

The soil samples will be analyzed for PCBs following procedures listed in the Notification. All soil samples collected will be extracted using EPA Method 3540C and analyzed in accordance with EPA Method 8082A to target detection limits of 0.05 mg/kg.

Decontamination of sampling equipment will be in accordance with the Standard Operating Procedure (SOP) for Concrete Coring, 40 CFR 761.79, Decontamination standards and procedure, and/or Subpart S of TSCA, Double Wash/Rinse Method for Decontaminating Non-Porous Surfaces, as appropriate for the sample matrix.

Excavated soil to be hauled off site will be characterized for waste classification based on in-situ collected samples. Following USEPA directives, the excavated soil will be characterized, handled and disposed as Toxic Substances Control Act (TSCA)-regulated PCB remediation waste.

If stockpiles are generated excavated stockpile samples will be collected and analyzed for additional analysis for waste characterization including volatile organic compounds (VOCs), metals, and petroleum hydrocarbons. Stockpiles will be constructed and maintained following CFR 761.65 (c)(9) including a liner below the piles, covering to prevent dust escaping from the piles, and escape of leachate or rain.

The eastern portion of the upper slab of the pipe tunnel will be broken up, removed and hauled off-site as TSCA regulated waste. Based on existing data, no further concrete sampling is proposed. However, if concrete sampling is required, sampling will be conducted according to procedures described in Notification Attachment 3. The Harbor Department proposes that the concrete criteria for removal be similar to the values applied for soil (0.22 mg/kg).

Dedicated excavators and trucks will be used to excavate and transport the concrete and soil on-site for the duration of the excavation. The contractor will construct and maintain a decontamination pad for the decontamination of equipment and vehicles. Water from decontamination activities will be collected and properly managed. The hauling contractor shall inspect each truck prior to leaving the area, and remove any loose material and debris from all equipment that has been in that area prior to moving equipment to other areas of the Site. At the completion of soil removal and loading activities, all moveable equipment will be decontaminated in accordance with 40 CFR 761.79, decontamination standards and procedures, prior to leaving the Site.

Best management practices (BMPs) will be followed for dust control and water runoff to ensure that the PCB-impacted material is adequately managed on-site.

2.4 Contingency Tasks

The completed investigations provided detailed information on the lateral and vertical distribution of PCBs in soil, and confirmation sampling is also proposed. If confirmation sample results or observations during excavation indicate site conditions that are different from those conditions outlined in this work plan, or if implementation of the proposed remedy is not feasible, the Harbor Department will stop excavation and contact USEPA, present the new information and propose tasks to address the new conditions.

2.5 Soil, Concrete and Liquid Disposal

The excavated soil and concrete from the PCB area will be hauled off-site for disposal as a TSCA-regulated waste in accordance with 40 CFR 761.61(a)(5)(iii). Liquid generated by decontamination procedures will be hauled off-site for treatment and disposal as a TSCA-regulated waste.

3.0 CONCEPTUAL SITE MODEL FOR NORTHERN AREA IMPACTED WITH RESIDUAL PCBs IN SOIL

To develop a conceptual understanding of the northern area impacted with residual PCBs in soil, as illustrated on Figure 6, information regarding potential chemical source, chemical release and transport mechanisms, locations of potentially exposed human receptors, and potential exposure routes were assessed. This information is schematically outlined in a CSM shown on Figure 7. As defined by U.S. Environmental Protection Agency (USEPA, 1989), all of the following four components are necessary for a chemical exposure pathway to be considered complete and for chemical exposure to occur:

- A chemical source and a mechanism of chemical release to the environment;
- An environmental transport medium (e.g., soil) for the released chemical;
- A point of contact between the contaminated medium and the receptor (i.e., the exposure point); and
- An exposure route (e.g., direct contact with soil) at the exposure point.

The following sections describe these components and provide a basis for the CSM.

3.1 Source and Nature and Extent of PCBs in Northern Area

Following the excavation of PCB-impacted soil in the future park area, the area north of the excavations will include residual PCB concentrations in soil above residential ESLs and RSLs. The PCBs impacts in the northern area are consistent with the interpretation that a surface spill occurred at a former electrical equipment location to the south and laterally spread PCBs at the Site. The northern area consists of PCB-impacted soil at a depth of a few feet overlain by fill and coarse gravel to support railroad lines and roads. Post-1999 construction of the railroad lines and adjacent service access road presumably included the addition of 2 to 3 feet of fill over the layer of PCB-impacted soil, resulting in raised topography in this area (Figure 3B).

The southern, eastern and western extents of PCBs are defined, and the vertical extent of PCBs is also generally delineated (Figures 3A and 3B). The existing data set indicates concentrations of up to 35 mg/kg in the northern railroad area, which is much lower than PCB concentrations of up to 4,800 mg/kg reported in 1998-1999 in the vicinity of the pipe tunnel. The northern extent of PCBs in soil has essentially been defined based on three boring locations, north of the railroad area (PS-31, PS-32, and PS-33). In these soil borings, 18 soil samples were collected from 1.5 feet bgs to 8 feet bgs (Figure 3B) and PCBs were detected at a concentration above 0.22 mg/kg in only two samples. PCBs were detected in soil samples PS-31 at 4.5 feet and PS-33 at 3 feet at concentrations of 0.44 mg/kg and 0.25 mg/kg, respectively. PCBs were not detected in the deeper samples at these locations. These northern sampling locations are located in an industrial area, adjacent to a railroad line and road. The PCB concentrations are well below the lowest commercial/industrial RSL of 0.66 mg/kg; therefore, the northern boundary of PCB impacts is considered delineated.

Analytical results for soil in the upper 1.5 feet, in the topographically raised area (soil borings PS-19 to PS-22 and PS-26 to PS-30), indicated that the shallow soil contains no detectable PCBs (See Table 1 and Figure 3A). PCBs were detected in soil at depths of 3 feet to 8 feet bgs. Therefore, PCB impacts in the northern area are likely related to pre-1999 spills or releases (prior to placement of fill and coarse gravel to support railroad lines and roads).

3.2 Chemical Release Mechanisms and Identification of Transport Media

Chemical properties of the PCBs and the physical characteristics of the Site were reviewed to identify factors that might allow the release and transport of PCBs in soil. Release of PCBs can potentially occur through wind and/or mechanical erosion (i.e., during construction) and downward migration of chemicals into the groundwater. These types of releases may result in dust (with sorbed chemicals) emissions in air or the movement of chemicals downward into groundwater with infiltrating precipitation (i.e., leaching from soil). The presence of a fill layer (approximately 2 to 3 feet in thickness) above the PCB-impacted soil precludes generation of fugitive dust and direct contact with soil impacted with PCBs. Further risks of downward migration in soil via infiltrating precipitation are likely to be limited by the presence of fill soil above the PCBs and by the Site usage that includes a paved road and railroad lines with no landscape watering in that part of the Site. Additionally, the Harbor Department restricts access and redevelopment of the Site.

The raised topography in the railroad/access road area is bounded to the south by a sloped and bare soil surface that extends from the asphalt access road to the bare flat soil in the area of the proposed park. That bare exposed sloped soil consists of fill soil that was evaluated in soil borings PS-19 to PS-22 and PS-26 to PS-30 with samples collected at 0.5 feet and 1.5 feet below ground surface. No PCBs were detected in these soil samples, indicating that the bare sloped soil surface along the southern edge of the access road is not impacted with PCBs and is not a point of exposure for potential receptors.

Although it is possible that a hypothetical construction worker receptor could contact PCB-impacted soil during excavation in the northern area, this contact is expected to be very infrequent due to restrictions on access in the railroad-controlled parcel. Significant construction or development in the PCB-impacted northern area is unlikely due to existing infrastructure, which includes active railroad lines and adjacent service access road, and future construction projects will also be controlled by the Harbor Department who will retain documentation of the residual PCBs and restrict or require specific conditions for construction in that area However, in the event of construction activities in PCB-impacted northern area, potential risks to construction worker receptors should be evaluated. In general, any hypothetical construction worker receptor will be performing activities consistent with a Site Management Plan (SMP) and a Site Health and Safety Plan (HASP). The SMP, HASP, and best management practices (BMPs) will protect construction worker receptors from hazards associated with exposure to PCB-impacted soil.

3.3 Potential Exposure Points

The third component necessary for an exposure pathway to be complete is a point of contact between the contaminated medium and the receptor (i.e., the exposure point). As mentioned in the previous section, with the exception of the hypothetical construction worker receptor, direct contact with PCBs in soil is limited by the presence of 2 to 3 feet of fill material. Under current land use scenario, there is no exposure point with PCBs in soil. Under future land use scenario, future construction workers may be directly exposed to PCBs in soil. For soil, the exposure point is defined as the PCB-impacted soil in the northern area.

3.4 Potential Human Receptors

In addition to exposure points, potential human receptors at the Site are necessary for an exposure pathway to be complete. Hypothetical human receptors identified for evaluation in this assessment were identified on the basis of proposed activities that could possibly result in direct contact with PCBs, and future land use (i.e., the land use in the PCB-impacted northern area is expected to remain industrial, as a railroad and service access road). Currently, there are no potential receptors that may directly contact PCB-impacted soil beneath the railroad lines or service access road. On the basis of potential future construction or development in the area, a hypothetical construction worker receptor was included in the CSM.

3.5 Exposure Pathways Considered Potentially Complete and Significant

The fourth and final component, a complete exposure pathway (i.e., route of exposure) is discussed in combination with the third component (i.e., presence of receptors) to define those exposure pathways considered to be complete and significant. As indicated in the CSM (Figure 7), potential contact with PCBs could occur via exposure to soil at depths of 2 feet bgs to 8 feet bgs.

The hypothetical future construction worker receptor is included in this CSM in the event any future construction or re-development occurs in PCB-impacted northern area. This receptor is expected to be a short-term outdoor worker, for a single construction or development project. This receptor spends the workday outdoors and may come in contact with both surface and subsurface soils. The exposure pathways assumed to be complete and significant for the hypothetical construction worker receptor include:

- Incidental ingestion of soil;
- Dermal contact with soil; and
- Inhalation of dust generated from the subsurface.

3.6 Summary

Based on the CSM, incidental ingestion of soil, dermal contact with soil, and inhalation of dust were identified as potentially complete exposure pathways for the hypothetical future construction worker receptor. As mentioned previously, the PCB-impacted northern area includes active railroad lines

and a service access road. The Harbor Department restricts access and redevelopment of the Site and the railroad controls access in the northern area; therefore, construction activities are unlikely and not anticipated in the northern area. In the event of development or construction activities are planned for this area, potential risks to construction worker receptors should be evaluated based on the site-specific exposure scenario anticipated on a case by case basis.

4.0 SUMMARY OF PROPOSED REMEDIAL ACTION

As outlined in previous sections, the PCB concentrations in soil at the Site will be addressed by excavation and off-site disposal of soil and concrete in the southern part of the Site. In Section 3,0, a CSM was developed to present a conceptual understanding of the northern area impacted with residual PCBs in soil. The only potentially complete exposure pathways in the northern area included incidental ingestion of soil, dermal contact with soil, and inhalation of dust for the hypothetical future construction worker receptor. However, due to access restrictions in this northern area and the presence of active railroad lines and roads, no action is proposed at this time. In the unlikely event of construction activities in the northern area, potential risks to construction worker receptors should be evaluated based on the site-specific exposure scenario anticipated at that time.

The implementation of the proposed removal action will be scheduled after regulatory approval.

5.0 REFERENCES

Regional Water Quality Control Board, 2014. Review of Assessment Report, Pipeline Corridor Remedial Action Plan and Final Remedial Action Plan for China Shipping Terminal Phase III Expansion Project and Pipeline Corridor. May 30

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U.S. Environmental Protection Agency (USEPA). 1989. Risk Assessment Guidance for Superfund, Human Health Evaluation Manual, Part A. Interim Final. Solid Waste and Emergency Response. December.

FIGURES

TABLES

APPENDIX A

1999 TETRA TECH SOIL REMOVAL REPORT

(PROVIDED IN ELECTRONIC FORMAT)

APPENDIX B

LABORATORY RESULTS, SOIL ANALYSES

APPENDIX C

LABORATORY RESULTS, CONCRETE ANALYSES

ATTACHMENT A

REMEDIAL ACTION WORK PLAN
FORMER PCB REMEDIATION SITE
FRONT STREET BEAUTIFICATION CORRIDOR PROJECT
SAN PEDRO, CA 90731

ATTACHMENT B

CERTIFICATION